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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,540	09/04/2002	Phillip John Hogg	02-213	6943
20306	7590	02/07/2005	EXAMINER	
MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP			KOSAR, ANDREW D	
300 S. WACKER DRIVE			ART UNIT	
32ND FLOOR			PAPER NUMBER	
CHICAGO, IL 60606			1654	

DATE MAILED: 02/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/088,540

Applicant(s)

HOGG ET AL.

Examiner

Andrew D Kosar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-44 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

A Preliminary Amendment adding claims 43 and 44 and amending claims 6, 9-11, 13, 18, 20-23, 25-27, 30, 32, 35, 37-40 and 42 is acknowledged.

Claims 1-44 are pending and require restriction.

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-34, 37, 38, and 44, drawn to compounds of generic formula (I).

Group II, claim(s) 35, 36, and 39, drawn to methods of making compounds of formula (I).

Group III, claim(s) 40-43, drawn to methods of treatment and/or prophylaxis of disease with compounds of formula (I).

The inventions listed as Groups I-III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The alleged Special technical feature of groups I-III is the arsenoxide compounds of Formula (I). The compounds of formula (I) are anticipated by Fairlamb, et al. [PNAS, 1989: PTO-1449 3/19/02 Ref #2]. Fairlamb teaches melarsen oxide Try(SH)₂ (Mel T) and two other 'arsenoxide equivalent' compounds (Figure 2). Because the alleged technical feature is known in the art, it is not a 'special technical feature' and does not make a contribution over the prior art. Thus, the claims lack unity of invention.

The invention is drawn to a myriad of patentably distinct compounds which are contained in many different compositions for use in the methods, as embraced by the generic compound definition of claim 1. The compounds embraced by the broad generic claim 1 vary distinctly in their structures and in their functions, absent evidence to the contrary. Thus, an individual search is required of each individual compound. Therefore, as part of electing one of the groups as the elected invention, Applicant is also required to elect a specific compound, to which the elected invention will be examined on the merits as drawn to; as well as identifying those claims to which the elected compound is drawn. This requirement is not to be taken as an election of species, but rather as an election of a single invention, since each compound is assumed to be a patentably distinct invention, in the absence of evidence to the contrary.

The compounds listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the compounds lack the same or corresponding special technical features for the following reasons: The alleged special technical feature is compounds of formula (I). As stated *supra*, the technical feature, arsenoxide compounds linked to a cell impermeable component, is anticipated by Fairlamb. Because Fairlamb teaches species which are embodiments of Formula (I), the technical feature is not a contribution over the prior art, and thus the species are not linked by a special technical feature.

Further, with regards to the myriad of distinct compounds embraced by the broad generic definition, an international and a national stage application shall relate to one invention only or to a group of inventions so linked as to form a single general inventive concept ("requirement of unity of invention"). Where a group of inventions is claimed in an application, the requirement of unity of invention shall be fulfilled only when there is a technical relationship among those

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inventions involving one or more of the same or corresponding special technical features. The expression "special technical features" shall mean those technical features that define a contribution which each of the claimed inventions, considered as a whole, makes over the prior art.

The alleged special technical feature is compounds which are arsenoxides linked to a cell impermeable component. However, as indicated, for instance in claim 1, the compound structure is undefined, and may consist of any cell impermeable component, linker, and arsenoxide (or arsenoxide mimic). The myriad of compounds embraced by the broad generic are each separate and distinct structures, each subject to their own respective search. Thus, there is no special technical feature among the numerous compounds within the Groups.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

CLAIMS 1-44 REQUIRE RESTRICTION and NO CLAIMS ARE ALLOWED.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew D. Kosar whose telephone number is (571)272-0913. The examiner can normally be reached on Monday - Friday 8am-430pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bruce Campell can be reached on (571)272-0974. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Andrew D. Kosar, Ph.D.
Patent Examiner
Art Unit 1654

MICHAEL MELLER
PRIMARY EXAMINER

